

BRIEF NOTE

TWO SABELLID POLYCHAETES OF THE COLUMBIA RIVER ESTUARY¹

KEITH VERNER,² National Marine Fisheries Service, Northwest and Alaska Fisheries Center, Biological Field Station, P.O. Box 155, Hammond, Oregon 97121

OHIO J. SCI. 81(4): 182, 1981

The sabellid polychaete *Manayunkia speciosa* was first described (from the east coast of the United States) by Leidy (1858); it was later found by Krecker (1939), Britt (1965), and others in the Great Lakes.

Bay in one benthic grab sample (0.05m² Ponar dredge) in March 1979 and five grab samples in June 1979 (fig. 1). This is the first reported appearance of this species in the Columbia River system.

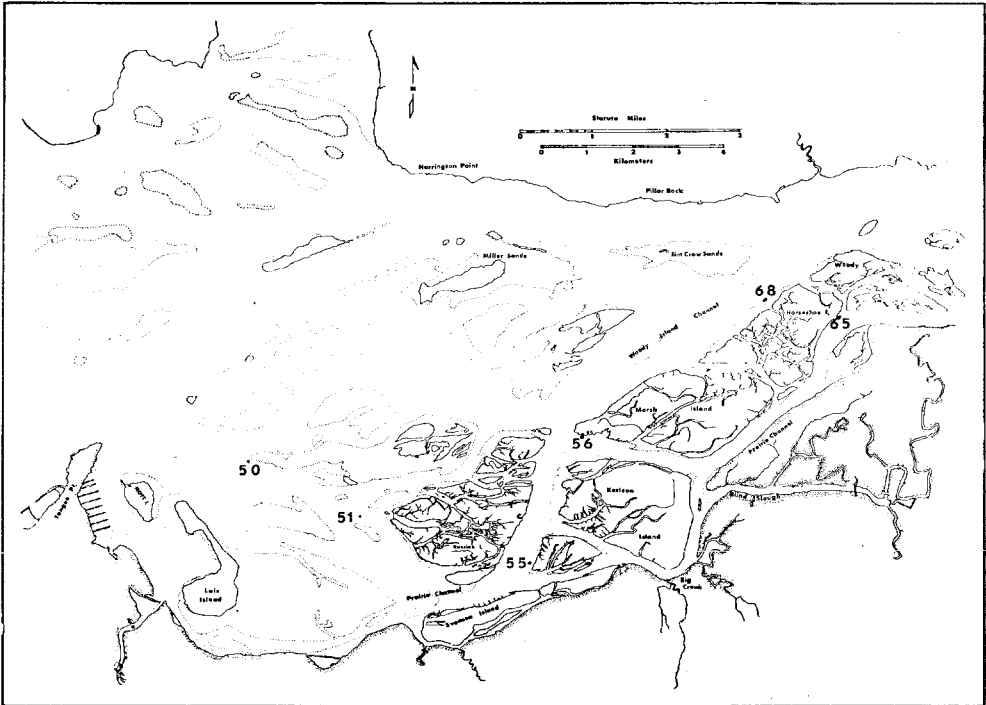


Figure 1 Six benthic grab sites where *Manayunkia speciosa* was found in Cathlamet Bay.

Manayunkia speciosa was reported in southern Oregon and California by Hazel (1966) and from lakes in northern Alaska by Holmquist (1967, 1973). In a recent study of benthic infauna of the Columbia River estuary, *M. speciosa* was found in Cathlamet

Physical parameters at sites where *M. speciosa* was found are presented in table 1, and sediment particle sizes at these sites are presented in table 2. Station 50 was the most downstream site at which *M. speciosa* was found. During spring, this station is usually upstream from saltwater intrusion; however, in summer and fall, bottom salinity increases there when river flow is reduced.

¹Manuscript received 17 June 1980 (#80-34).

²Present address: Section of Biochemistry, Molecular and Cell Biology, Wing Hall, Cornell Univ. Ithaca NY 14853

TABLE 1

Physical parameters at sites where *Manayunkia speciosa* was found in benthic samples from Catblamet Bay, March and June 1979.

Station	Number	Depth (m)	Salinity (%)	Temp. (°C)
68*	1	9.14	0.14	4.22
50	2	2.13	0.00	16.10
51	1	3.96	0.00	16.20
55	2	2.44	0.00	16.40
56	5	6.40	0.00	15.90
65	2	3.35	0.00	16.30

*Station 68 collected in March, all other stations collected in June.

Specimens of *Fabricia sabella oregonica* Banse, a marine species of sabellid polychaete, were found in a nonquantita-

TABLE 2

Particle size and organic content of sediment at sites where *Manayunkia speciosa* was found in benthic samples from Catblamet Bay.

Size (mm)	Station					
	68	50	51	55	56	65
Percentage Particle Size						
2-8*	0.06	0.00	0.00	0.00	0.00	0.03
1-2	0.22	0.00	0.00	0.06	0.06	0.26
0.5-1	4.24	0.09	0.24	0.77	2.53	1.36
0.25-0.5	49.50	2.88	12.03	3.50	32.26	12.00
0.125-0.25	42.67	57.16	66.01	39.80	44.93	60.33
0.063-0.125	2.88	31.59	13.72	33.40	12.27	16.09
0.002-0.063	0.41	7.68	6.40	21.35	7.58	8.44
<0.002	0.02	0.61	1.60	1.12	0.40	1.49
Organic Content (%)						
	0.76	2.48	2.40	4.20	2.30	2.51

*No particles greater than 8 mm measured.

tive sample taken near the mouth of the Columbia River, and its occurrence is reported herein primarily because of its close relation to the freshwater species *M. speciosa*. Leidy (1883) noted a similar biogeographical relationship of a species of *Fabricia* to *M. speciosa* on the east coast in the Schuylkill River at Fairmount, Philadelphia.

With the discovery of *M. speciosa* and *F. sebella oregonica*, the polychaete family Sabellidae is represented in the Columbia River estuary by two genera. Specimens of *M. speciosa* were sent to M. H. Pettibone of the Smithsonian Institution, Washington, D.C., for verification and have been deposited along with *F. sebella oregonica* in the worm collection of the National Museum of Natural History, catalog numbers 58805 and 58806, respectively.

LITERATURE CITED

Britt, N. W. 1965 A brief note on the distribution of the polychaete, *Manayunkia speciosa* Leidy, in western Lake Erie, Ohio J. Sci. 65: 175-176.

Hazel, C. R. 1966 A note on the freshwater polychaete, *Manayunkia speciosa* Leidy, from California and Oregon. Ohio J. Sci. 66: 533-535.

Holmquist, C. 1967 *Manayunkia speciosa* Leidy a freshwater polychaete found in Northern Alaska. Hydrobiologia 29: 297-304.

——— 1973 Fresh-water polychaete worms of Alaska with notes on the anatomy of *Manayunkia speciosa* Leidy. Zool. Jahrb. Abt. Sust. Oekol. Geogr. Tiere. 100: 497-516.

Krecker, F. H. 1939 Polychaete annelid worms in the Great Lakes. Science 89: 153.

Leidy, J. 1858 Proc. Acad. Nat. Sci. Phil. 10: 90.

——— 1883 *Manayunkia speciosa*. Proc. Acad. Nat. Sci. Phil. 35: 204-212.